

ABSTRACT OF THE DISCLOSURE

An ultrasonic transmitting and receiving apparatus which is capable of reducing generation of side lobes, and thereby, obtaining images of satisfactory quality even when performing
5 sector scan of an area having a wide range. The ultrasonic transmitting and receiving apparatus includes an ultrasonic probe having plural ultrasonic transducers, plural transmitting circuits for respectively generating plural drive signals to be supplied to the ultrasonic probe so as
10 to transmit an ultrasonic beam, plural receiving circuits for respectively processing plural detection signals output from the ultrasonic probe which has received an ultrasonic echo, switching unit for selectively connecting a predetermined number of ultrasonic transducers in the plural
15 ultrasonic transducers to the plural transmitting circuits and/or the plural receiving circuits, and control unit for controlling the switching unit to change a sparse pattern of the ultrasonic transducers which transmit and/or receive ultrasonic waves.